

TC3XYNT & C2000

C2000 Manager

Version 1.02

Operation Instructions



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1. Software function:

The virtual COM driver issued by our company is commonly used to make several virtual COM on host computer. To application, the virtual COM made by this software has the same interface as the real COM (COM1, COM2) built-in. It means the software that can be used on real COM (COM1, COM2) also can be used on this virtual COM.

C2000 series converters are the TCP/IP-RS485 converter. It supports the transparent communication between COM and TCP/IP. It gets the data from the virtual COM and sends it to the network, at the same time, get the data from the network and transmit it to the virtual COM.

C2000 Manager is used to map one or more IP of C2000/TC3XYNT into one or more Virtual COM, also manage the data transferring. Customers can use virtual COM driver make several virtual COM on their host PC, then appoint the C2000 plus converters COM to the appointed virtual COM, then use the transmitting function of C2000 Manager. After that, you may achieve the communication between the virtual COM and locale equipments.

2. Virtual COM Driver and C2000 Manager working condition:

Virtual COM Driver and C2000 Manager can work in the condition as below:

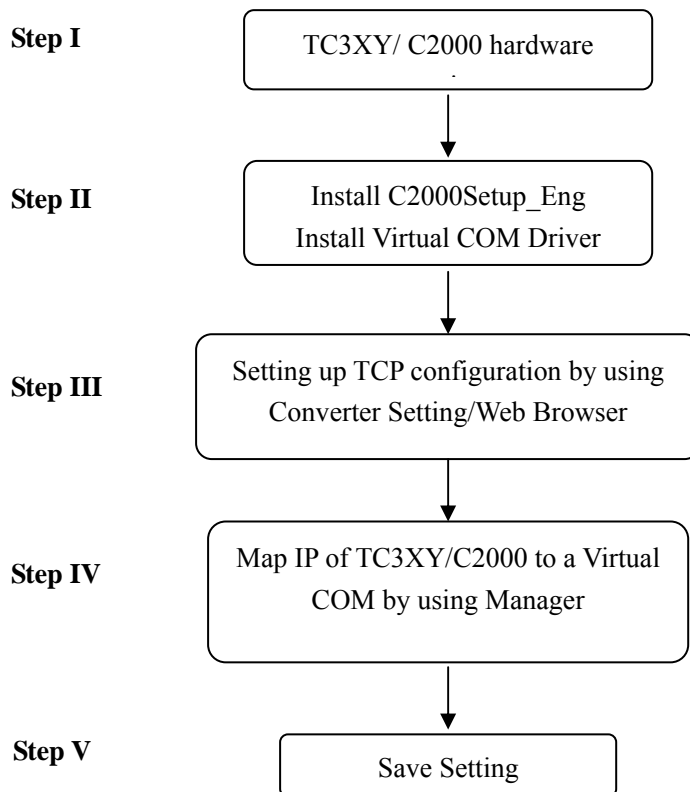
Windows 98

Windows 2000 Server, Service Pack 1 to 4

Windows 2000 Professional, Service Pack 1 to 4

Windows XP SP1 & SP2

3. Virtual COM installation progress:



4. Step I - TC3XYNT/C2000 hardware setting:

4.1. TC3XY hardware setting:

- Set ID of Controller: Please refer the Starter Guide document to define the ID of each controller on the network. There should be no duplicated ID on the same network. You can able to set the same ID for 2 controllers and then map them into 2 separate virtual COM but we don't recommend this way. It would slow down the speed of communication between PC and those controllers. We are going to recommend you map 2 or more TC3XYNT to only one Virtual COM port therefore the ID of each controller should be different.

- There are 2 switches next to the battery on the controller board. They are used to change the status of TCP configuration.

SW1=ON, Configurable Mode, user can read/write the TCP setting of controller.

SW1=OFF, Protected Mode, user can read but cannot write the TCP setting of controller.

SW2=ON, Forced Default IP Mode, the IP of controller will be back to default (IP: 10.1.1.10, subnet mask=255.255.255.0).

SW2=OFF, Normal Mode, the IP of controller will be the one in TCP setting.

To prepare for setting up TCP configuration of controller please change the SW1, SW2 to ON, then you can able to find and save the new TCP setting of controller. After finishing please change those switches back to OFF to apply for new setting.

4.2. C2000 converter hardware setting:

- The C2000 supports TC3XYMT which provides RS485/RS232 interface. One C2000 converter can drive up to 127 TC3XYMT. Please refer the Starter Guide to define the ID of each controller. If you are planning to use more than one C2000 in your application we are going to recommend you map all C2000 converter into only one virtual COM port therefore all of controllers on your application should have different ID.

- There are 4 switches on the bottom side of converter:

DIP1=ON, Configurable Mode, user can read/write the TCP setting of converter.

DIP1=OFF, Protected Mode, user can read but cannot write the TCP setting of controller.

DIP2=ON, Forced Default IP Mode, the IP of converter will be back to default (IP:10.1.1.10, Subnet mask=255.255.255.0)

DIP2=OFF, Normal Mode, the IP of converter will be the one in TCP setting.

DIP3, Reserved

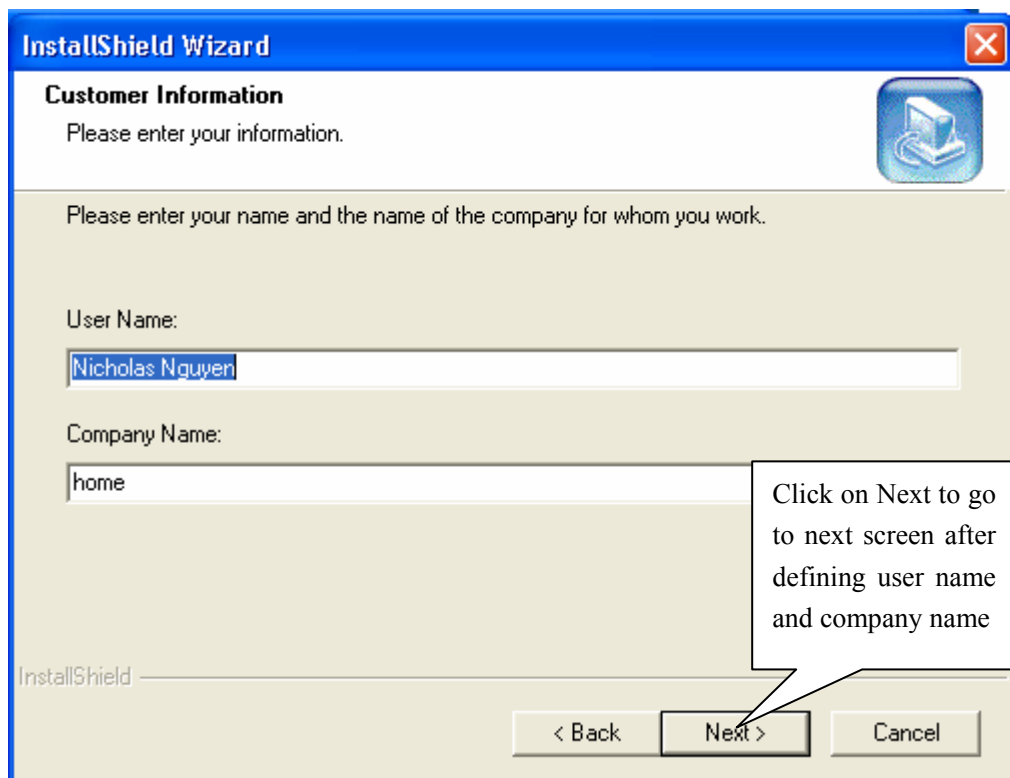
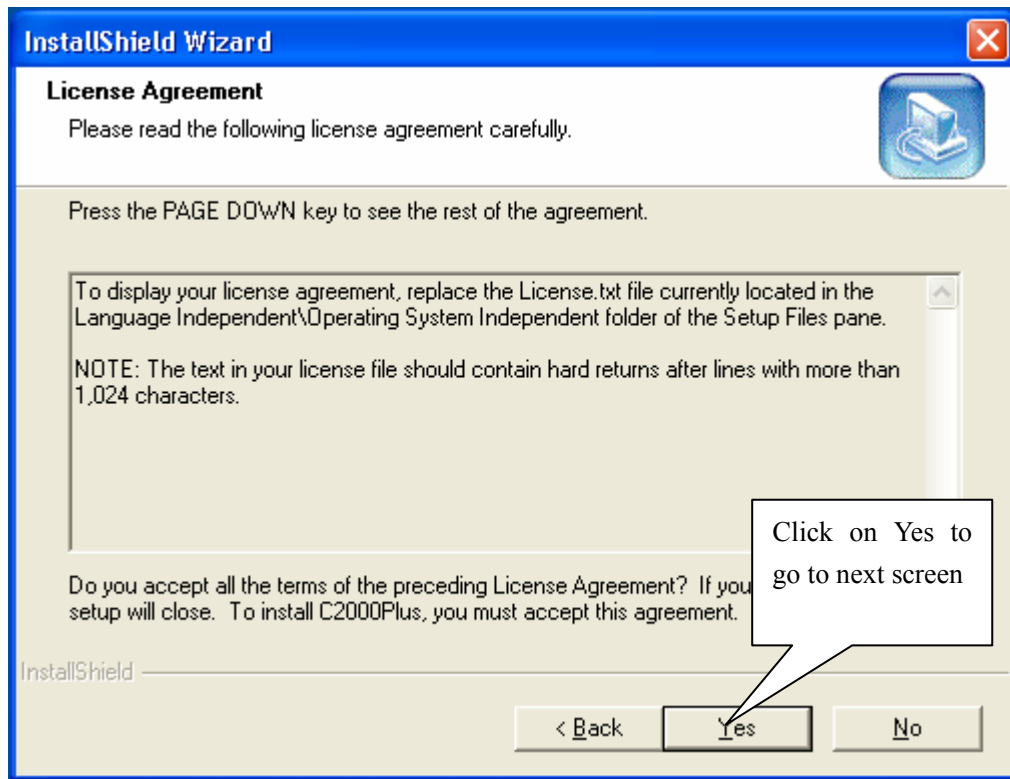
DIP4=ON, Reset Mode

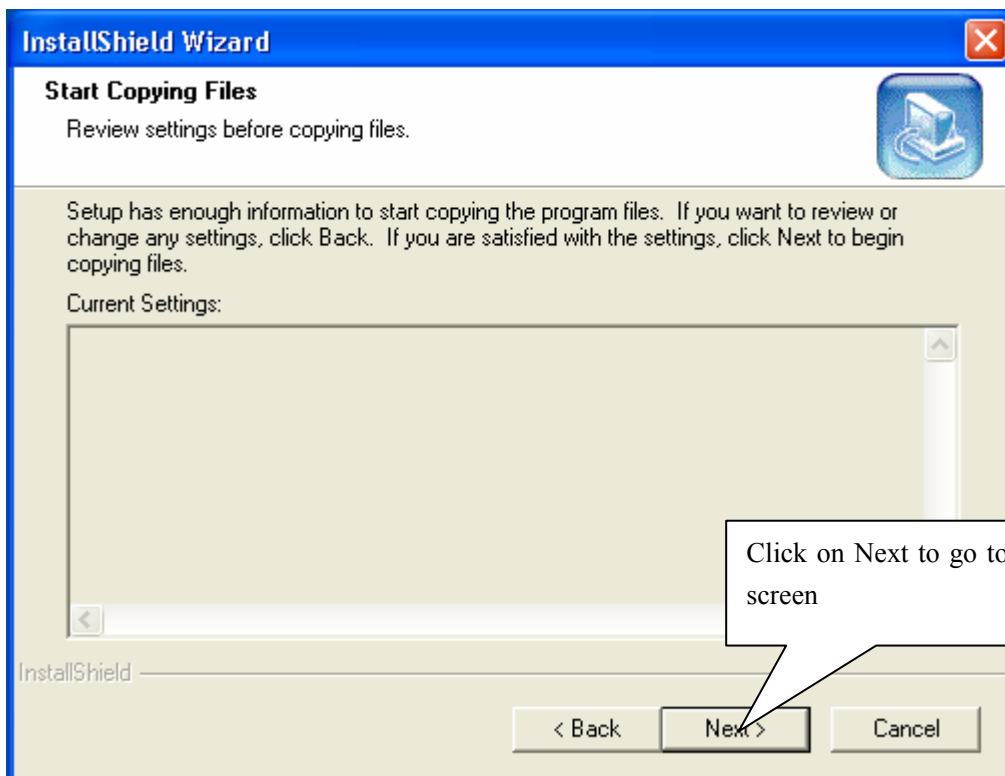
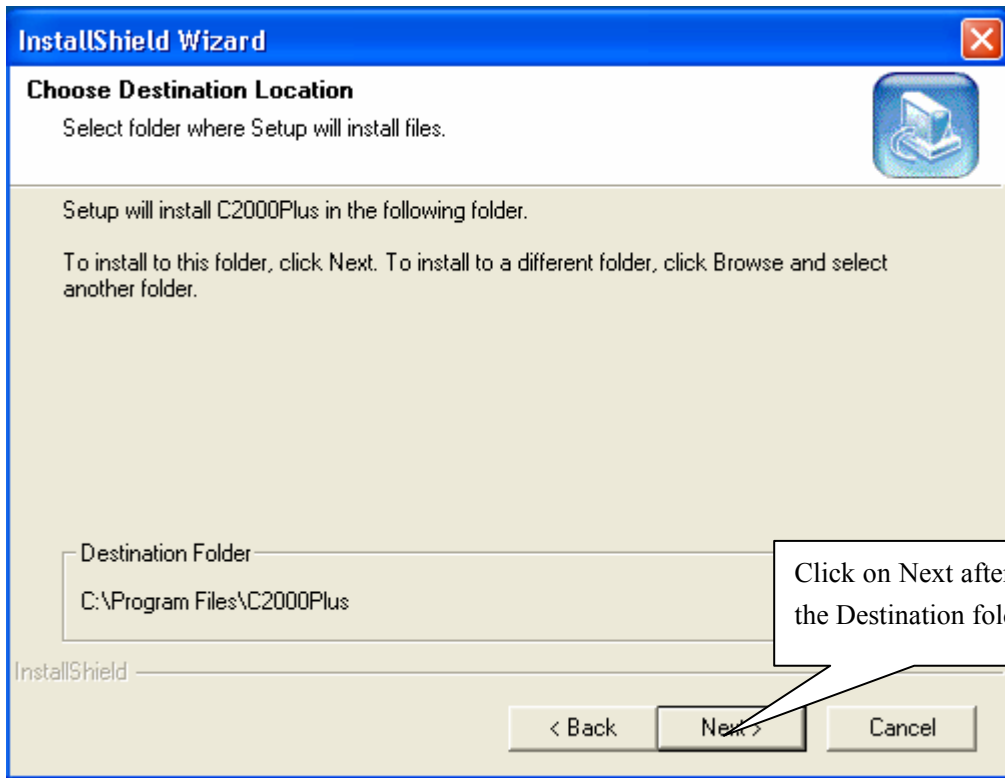
DIP4=OFF, Normal Mode

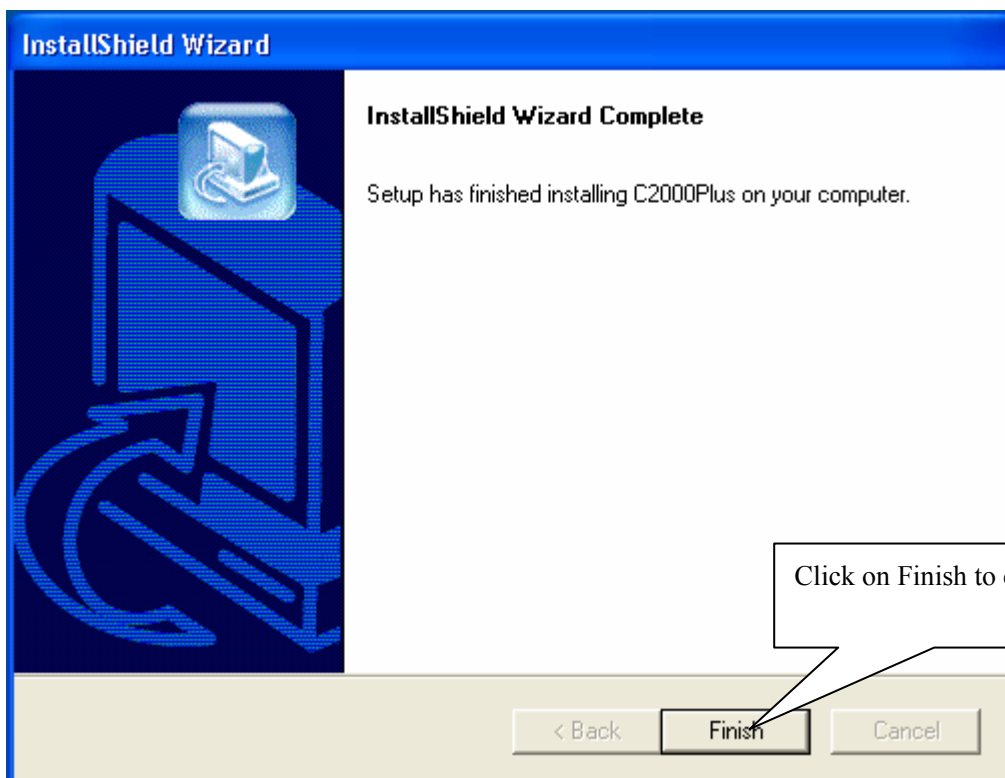
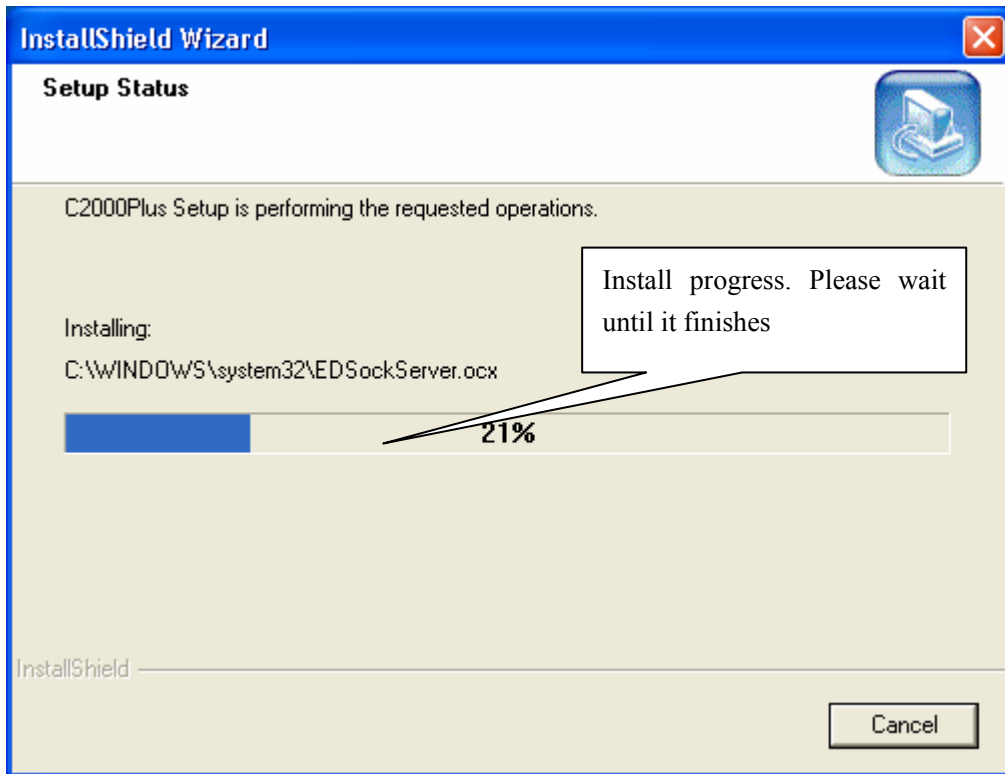
To prepare for setting up TCP configuration of converter please change the DIP1, DIP2 to ON, then you can able to find and save the new TCP setting of converter. After finishing please change those switches back to OFF to apply for new setting.

5. Step II - Install C2000Setup_Eng:

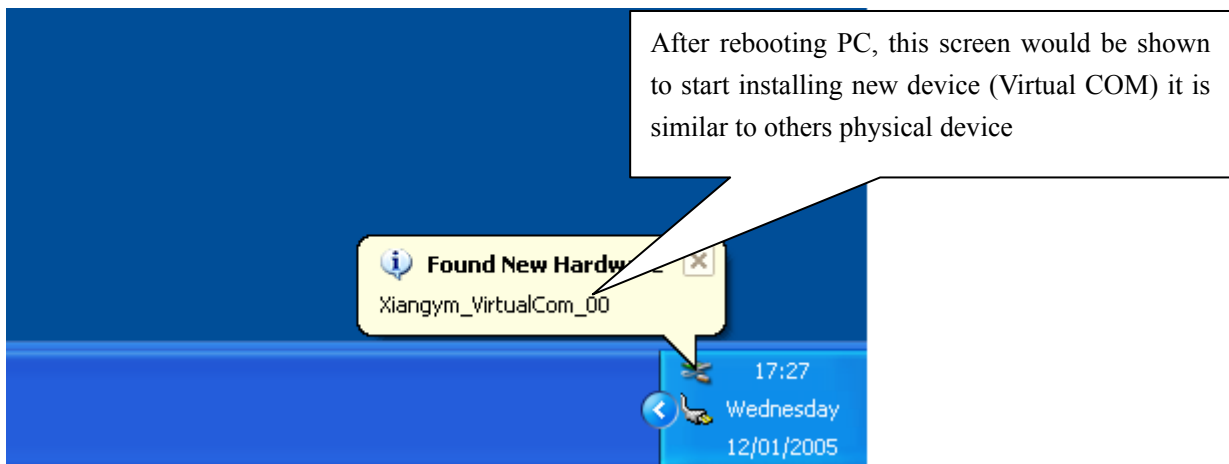
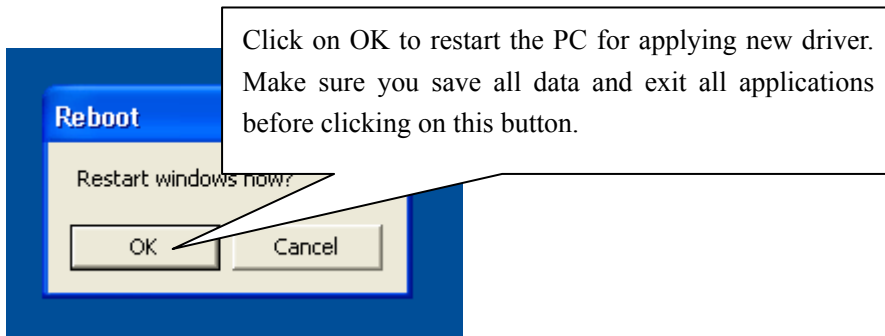
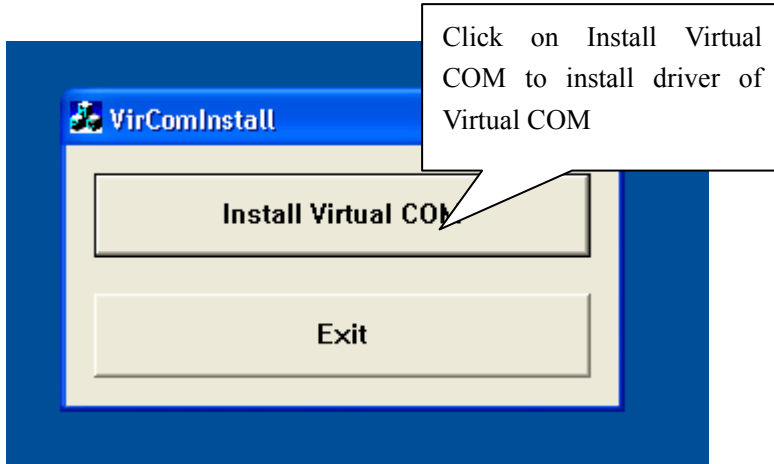
Unzip the C2000Setup_eng.zip into an empty folder, run Setup.exe, follow these steps below:

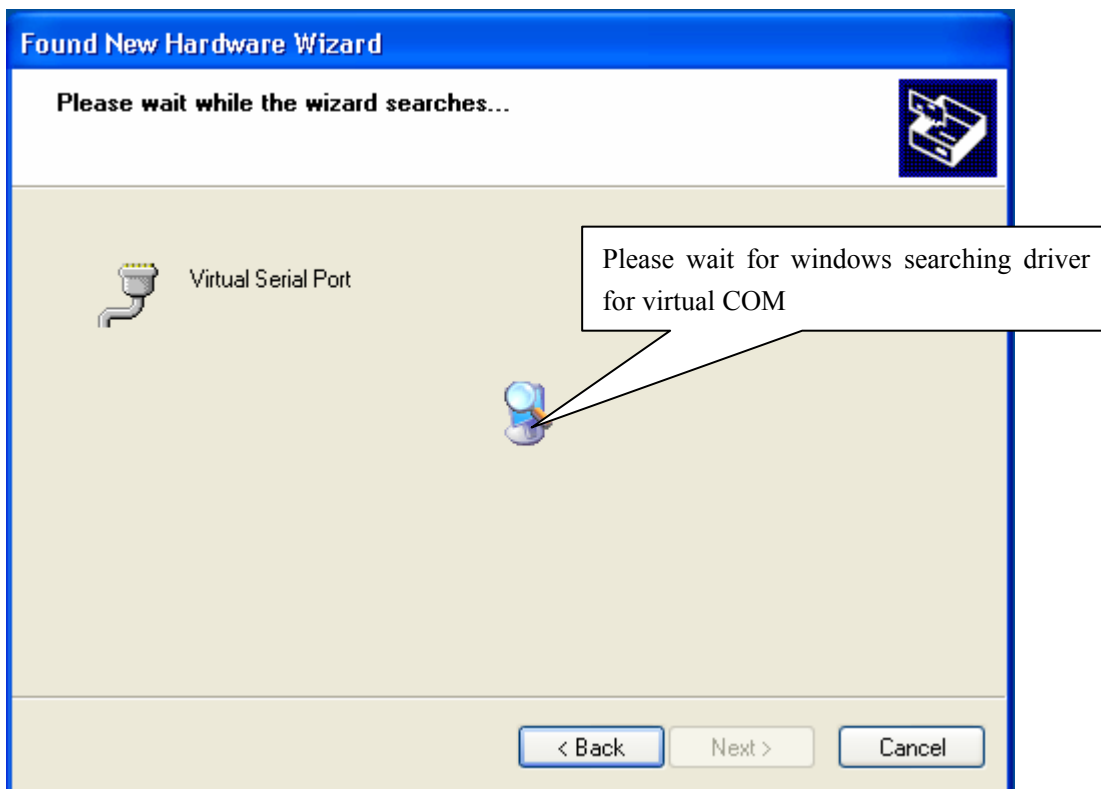
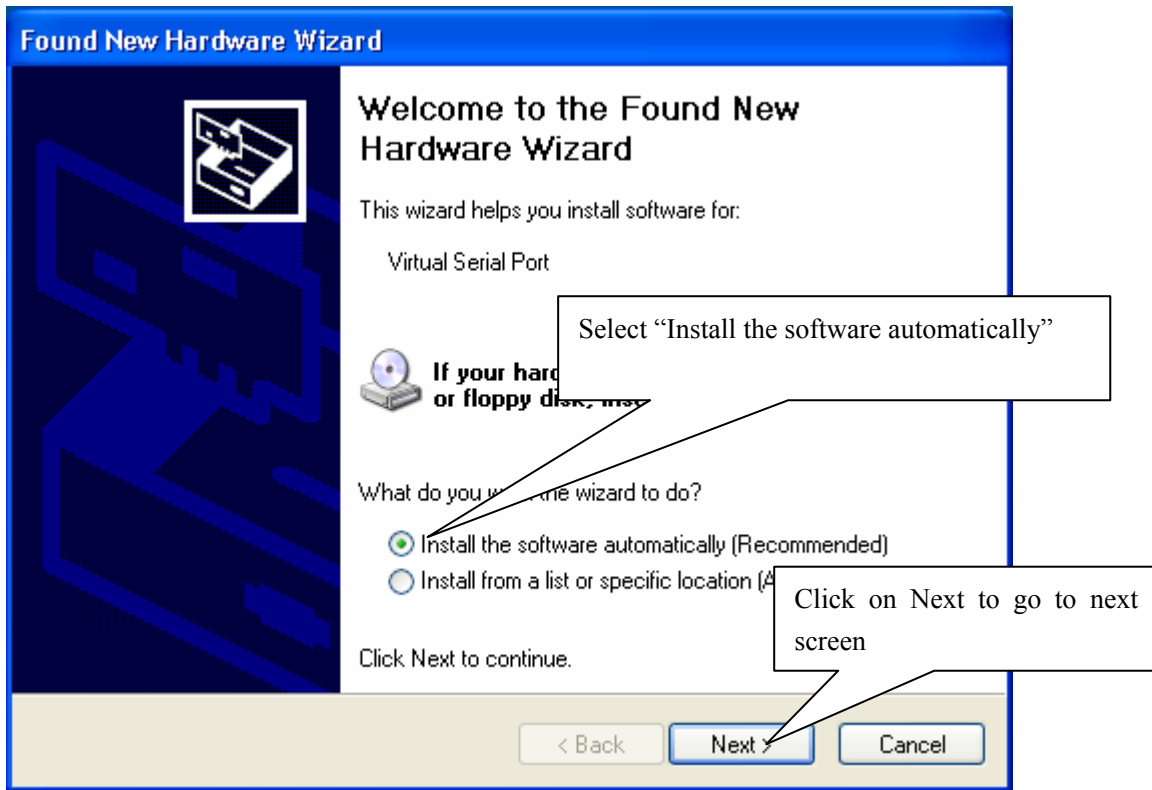


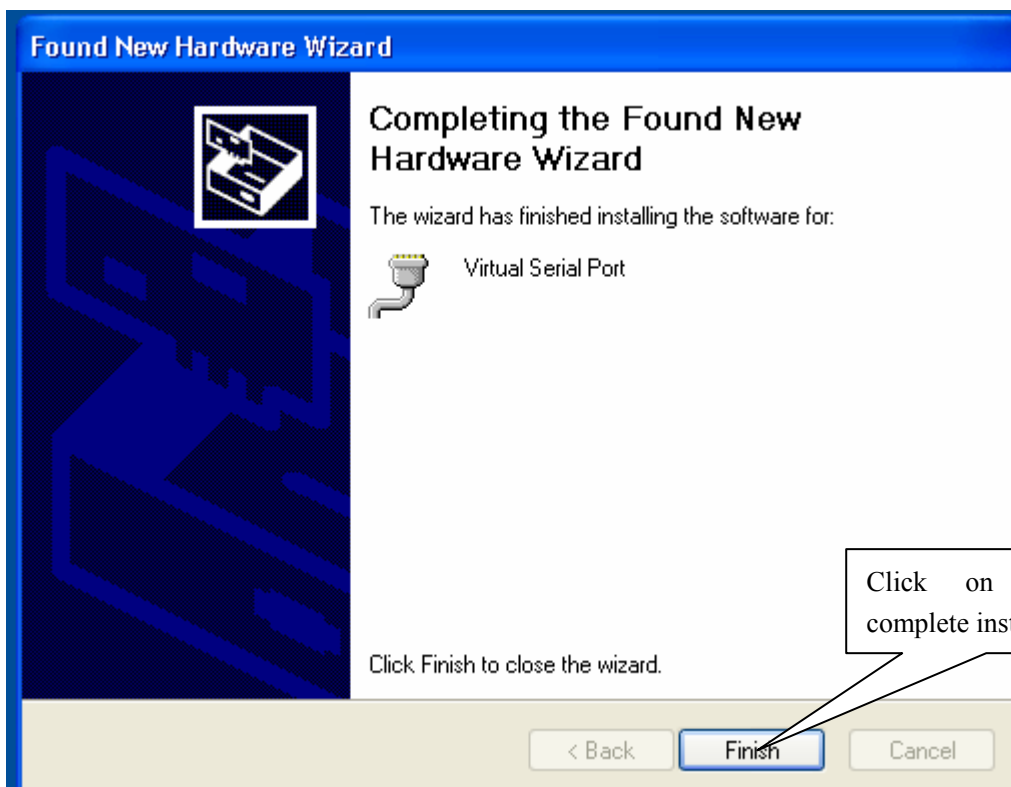
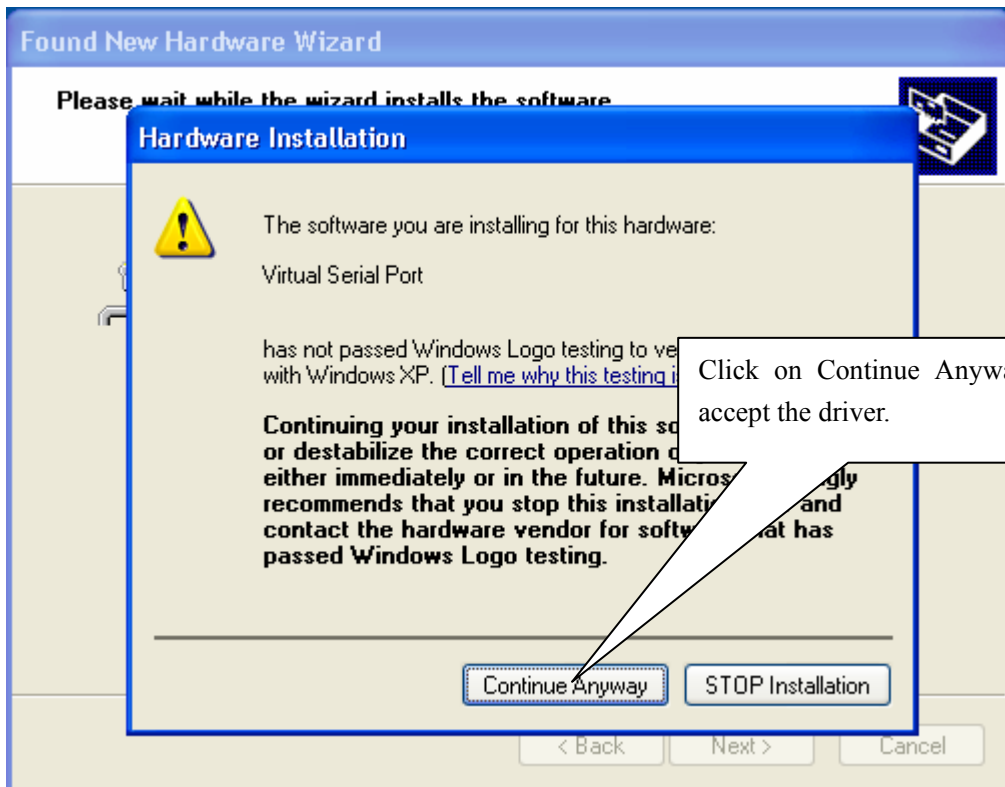


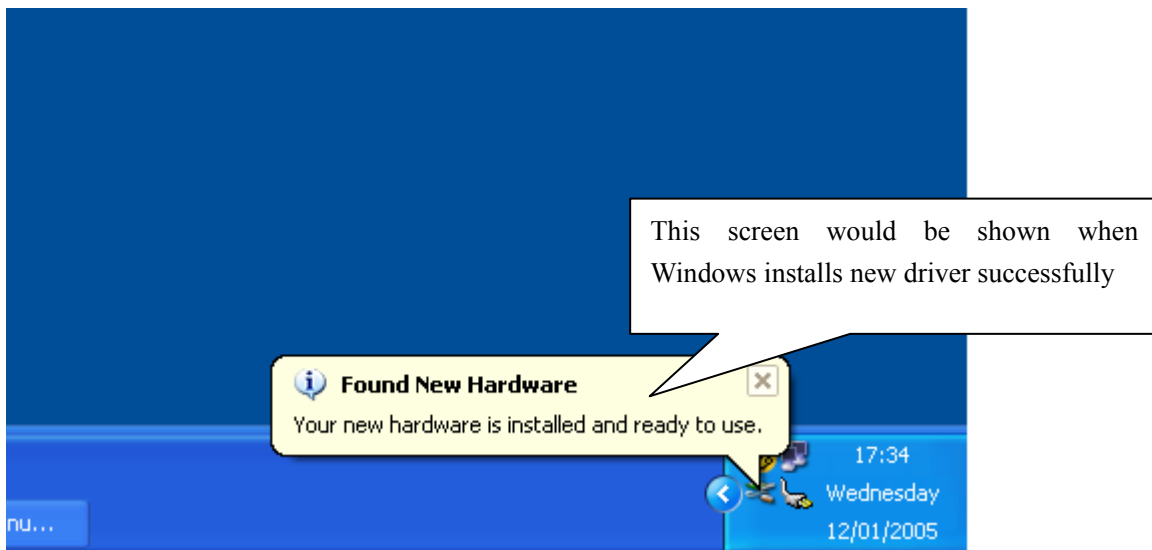


After complete installing C2000Setup_Eng the installer will install Virtual COM driver if it hasn't installed in your PC. Installing Virtual COM driver is similar to other physical device.







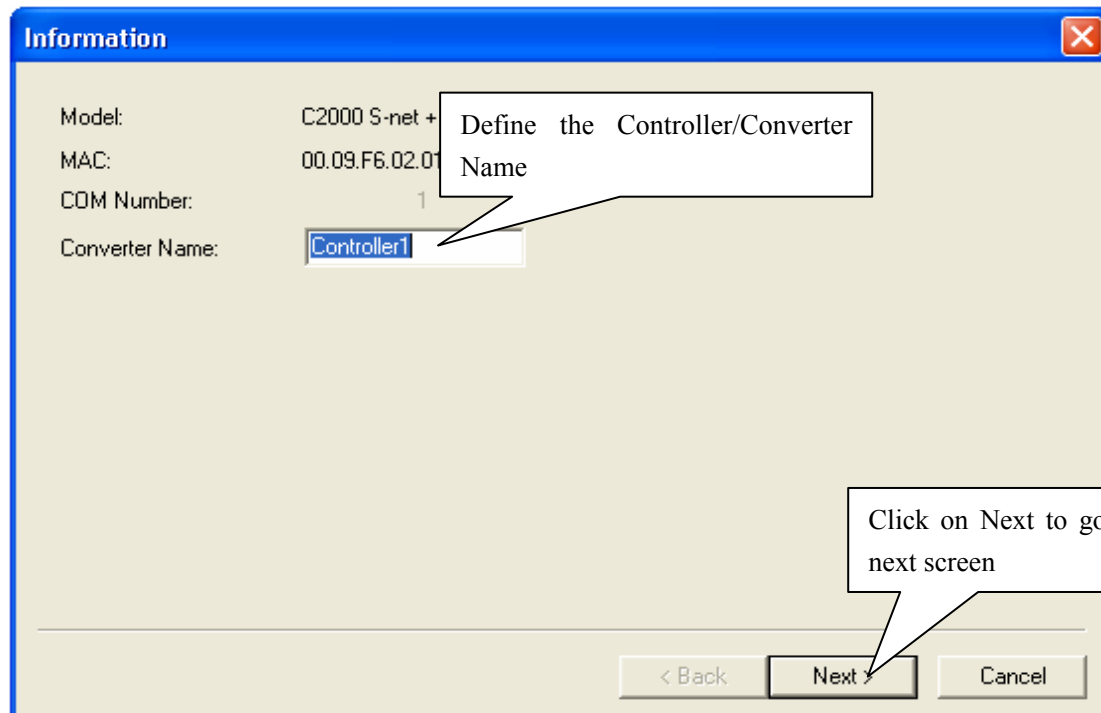
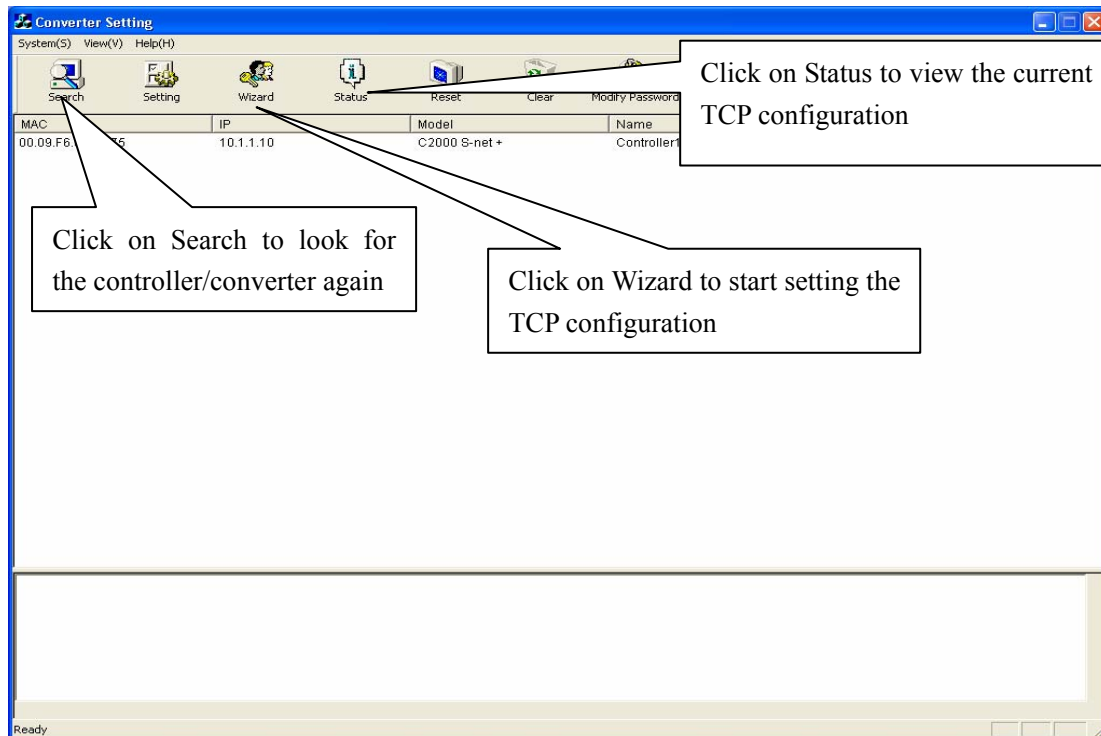


You have passed Step II successfully. Please refer below to change next step.

6. Step III - Setting up TCP configuration.

6.1. Using Converter Setting (recommended):

Lunch Start → Programs → C2000Plus → Converter Setting to run the Converter Setting software. When starting the software will search all TC3XYNT/C2000 in the network. All found controller and C2000 will be recorded like the screen below. If it cannot find the controller/converter please check the hardware, cable and your network again.



Network Setting Step 1

Automatic get IP address(DHCP) Uncheck this one to define a fixed IP

IP address: 192 . 168 . 0 . 110

Mask: 255 . 255 . 255 . 0

Define the IP of controller/converter it should be according to the IP of PC.
Example: IP of PC (192.168.0.X, 255.255.255.0)
The IP of controller/converter should be (192.168.0.Y, 255.255.255.0).
Make sure there is no PC/device is using 192.168.0.Y.

Click on Next to go to next screen

< Back Next > Cancel

Network Setting Step 2

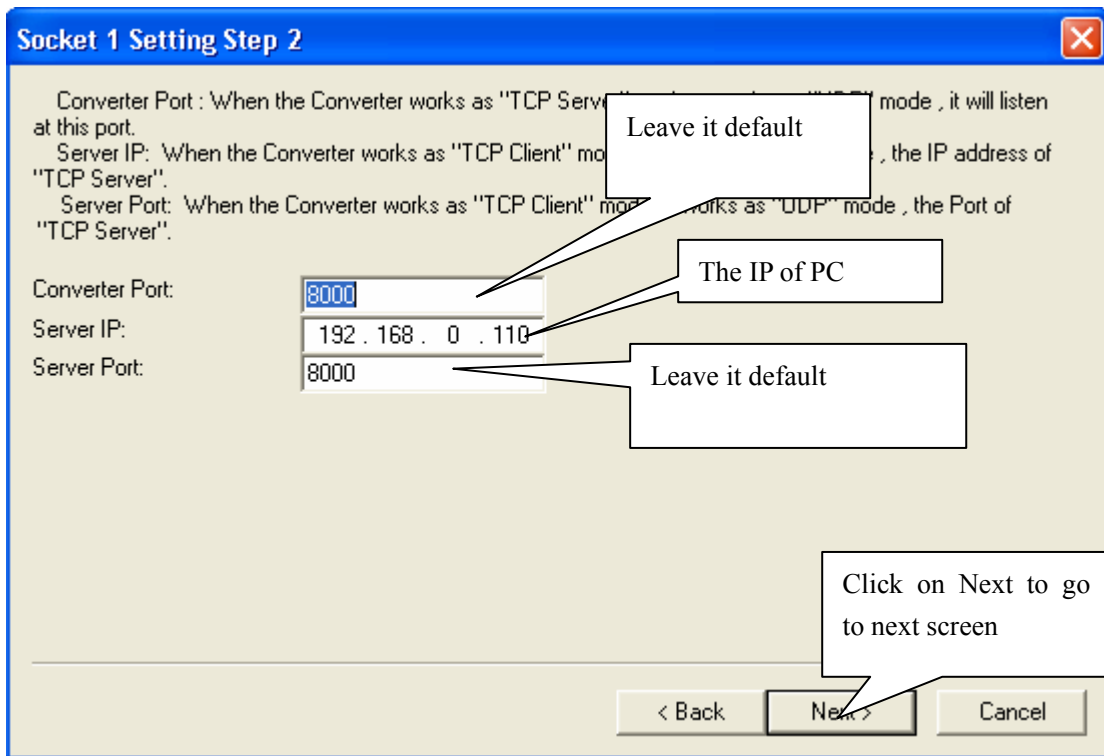
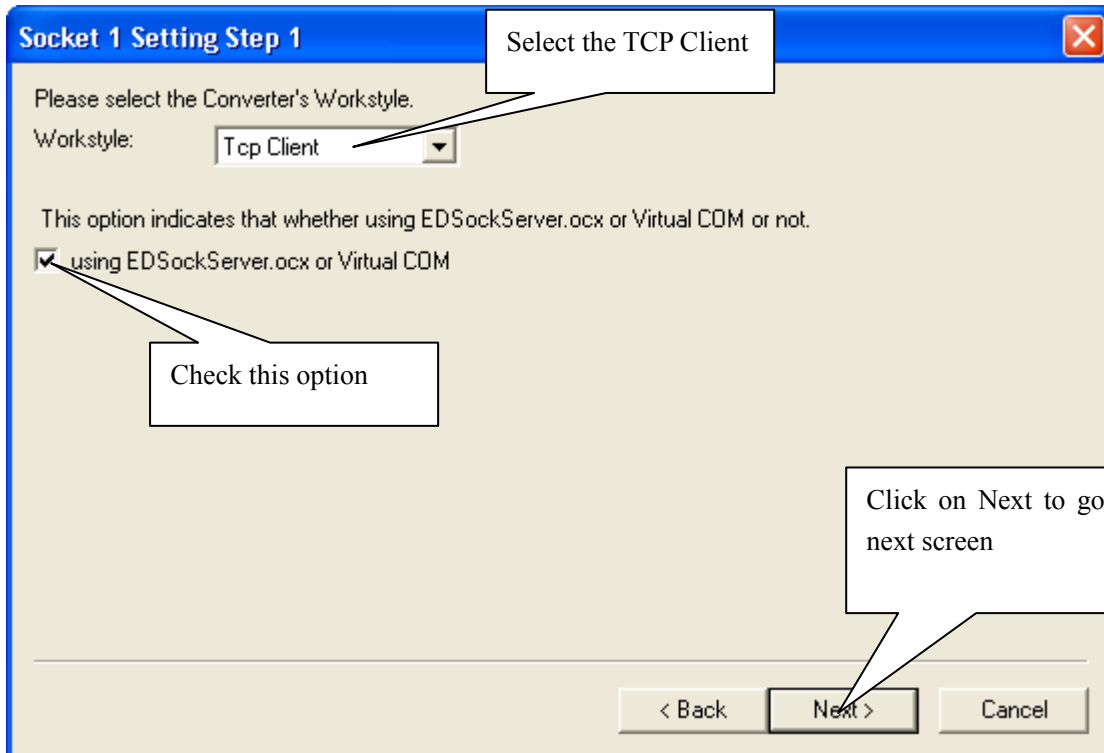
Please fill the Converter's Gateway .

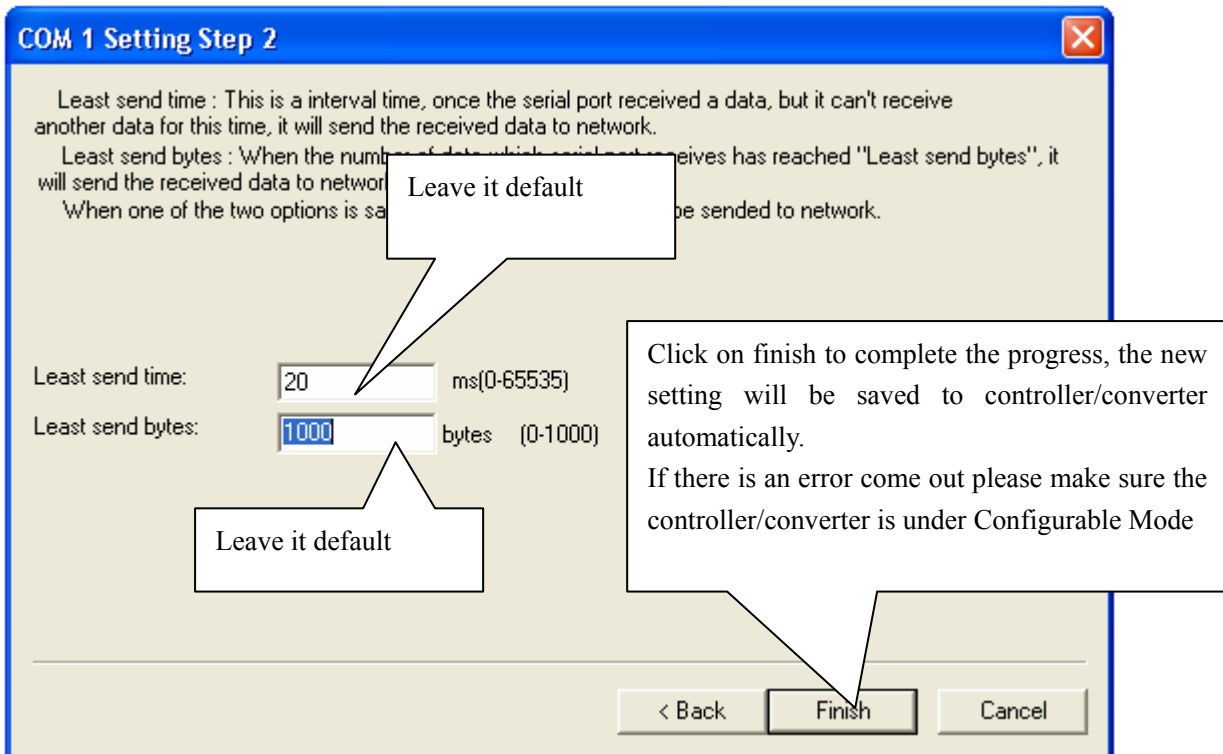
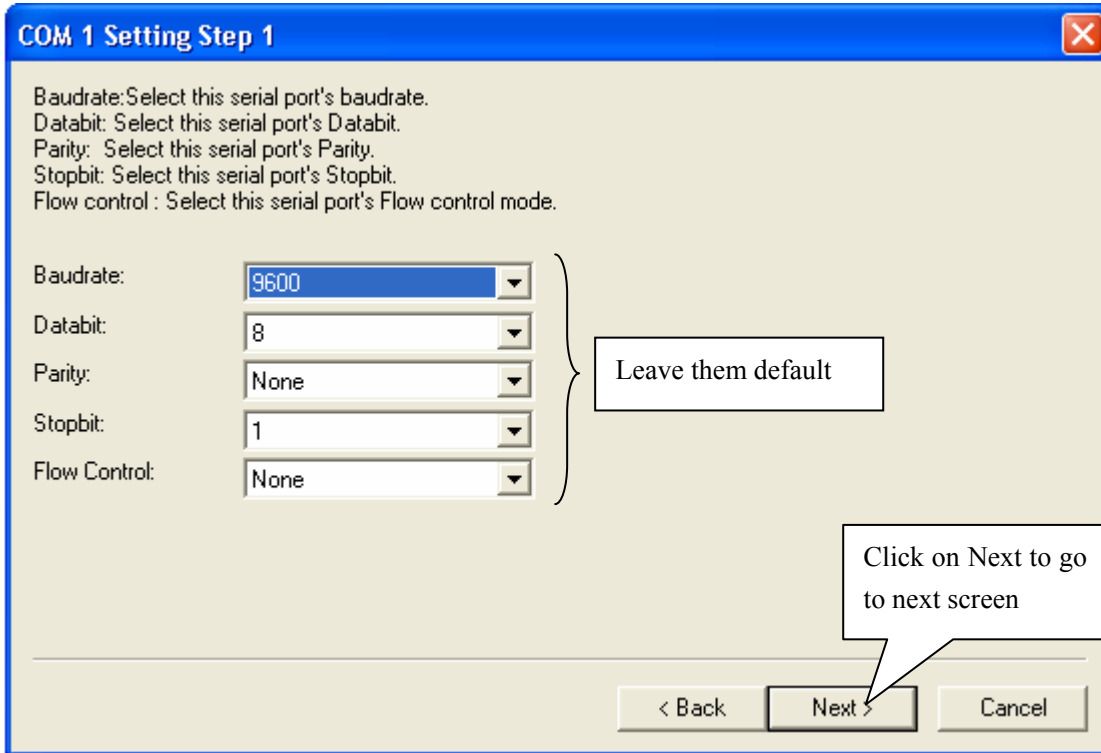
Gateway: 0 . 0 . 0 . 0

Leave it 0.0.0.0 if the controller/converter is not published to internet

Click on Next to go to next screen

< Back Next > Cancel

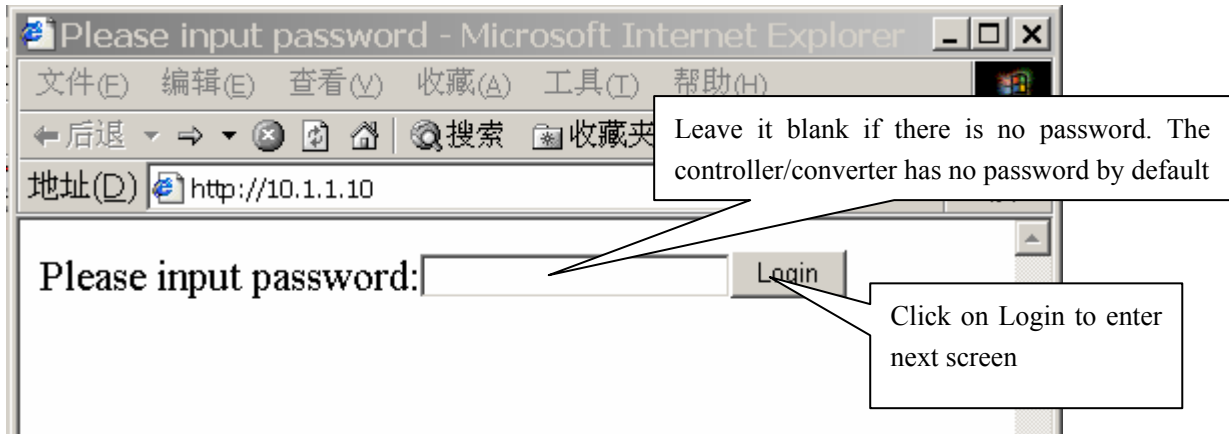




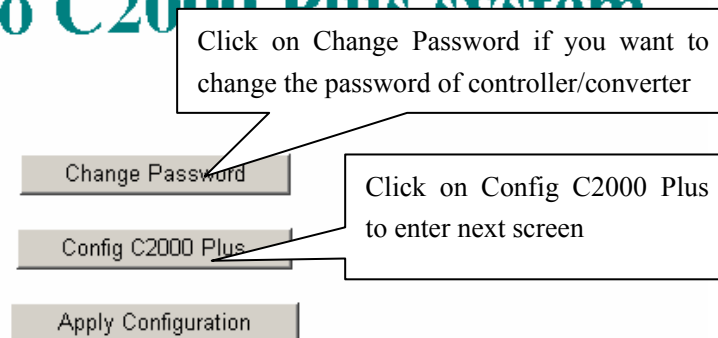
6.2. Using Web Browser:

The TC3XYNT/C2000 supports web based interface for setting up the TCP configurable. You can either using IE or any other web browser to access TCP configuration of controller/converter.

Example: the IP of controller: 10.1.1.10. Open your web browser, enter <http://10.1.1.10> in address bar.



Welcome to C2000 Plus system



Config C2000 Plus System

Net Parameter

MAC address:00 09 F6 01 02 0A

Automatic get IP address (DHCP)

C2000 IP address: Mask:

Gateway:

Workstyle

C2000 port:

Server IP address: Server port:

Socket Communication:

Proxy

Proxy server IP: Proxy server port:

COM Parameter

Baudrate: Databit: Parity: Stopbit:

Least send time: ms (range 0~65535)

Least send bytes: byte (range 0~1000)

CTS/RTS flow control

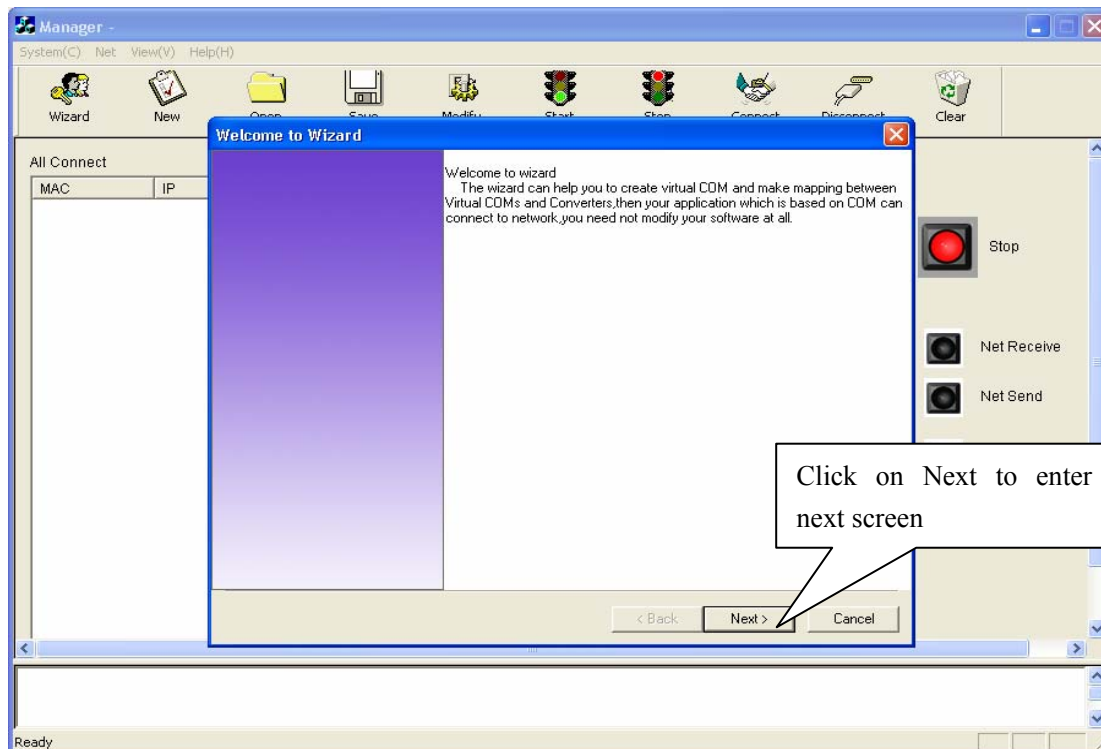
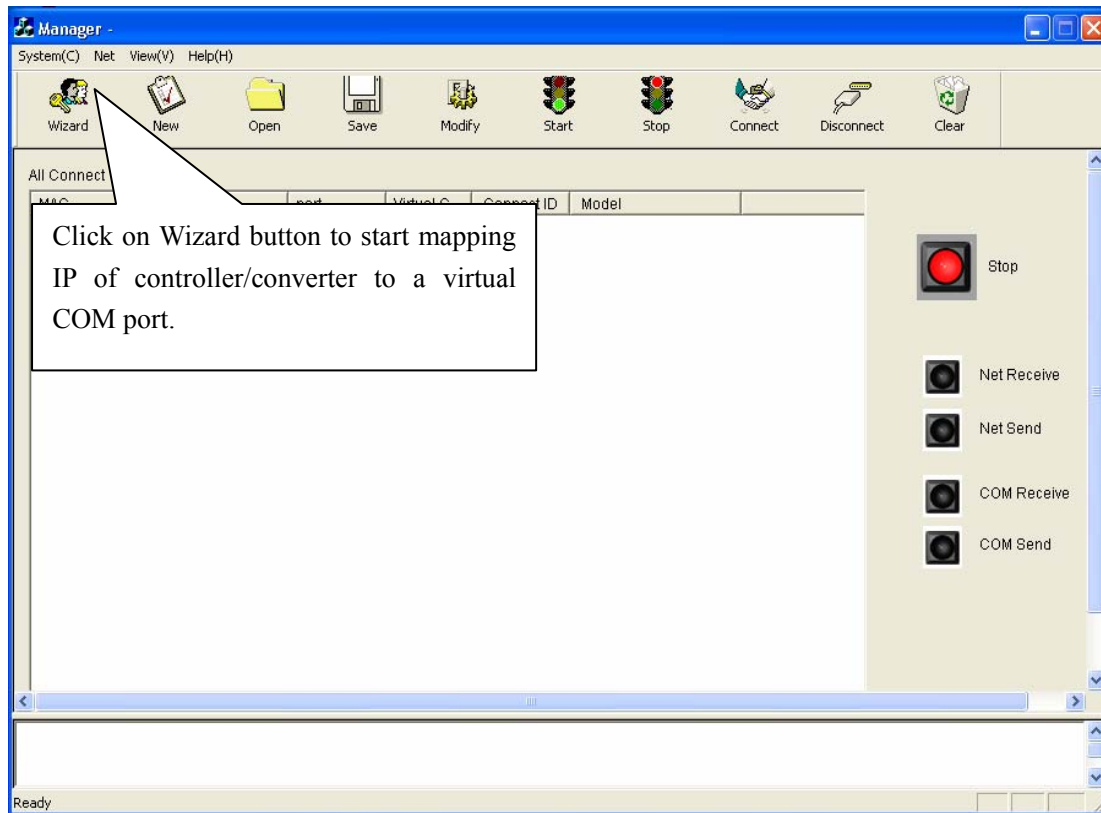
Xon/Xoff flow control

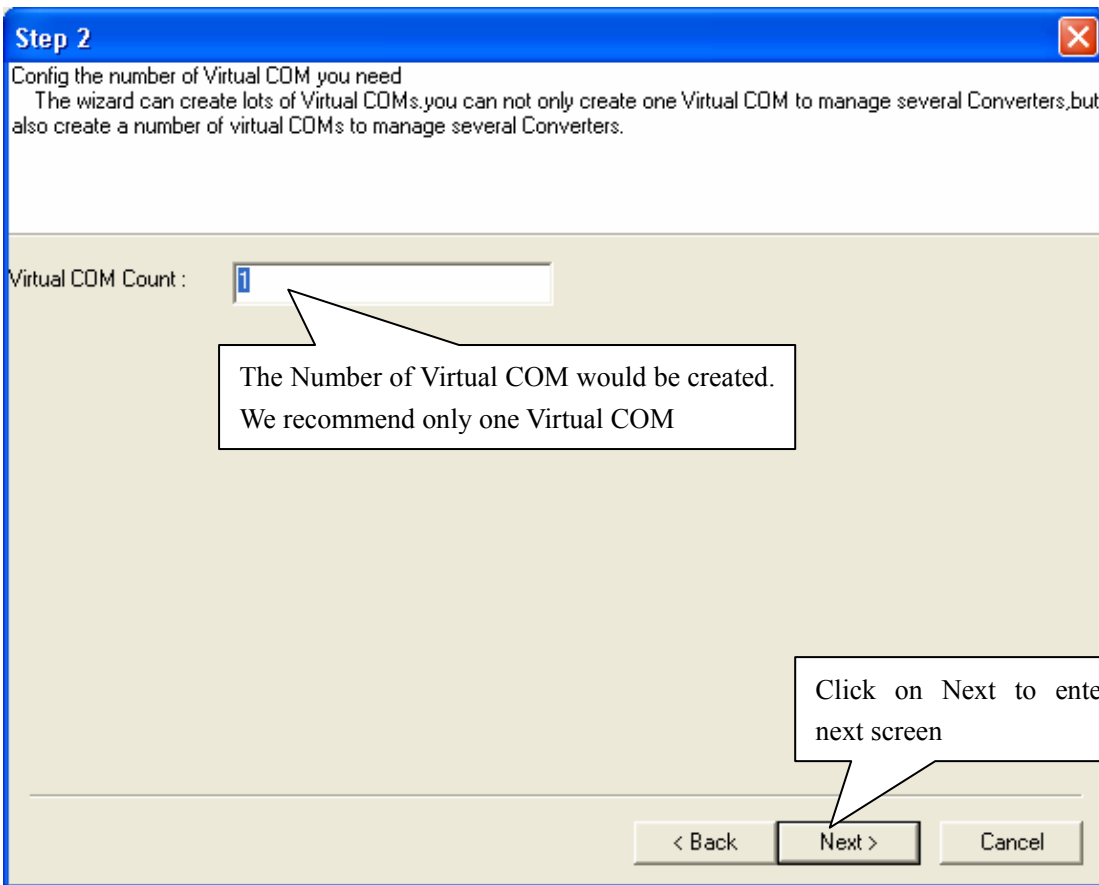
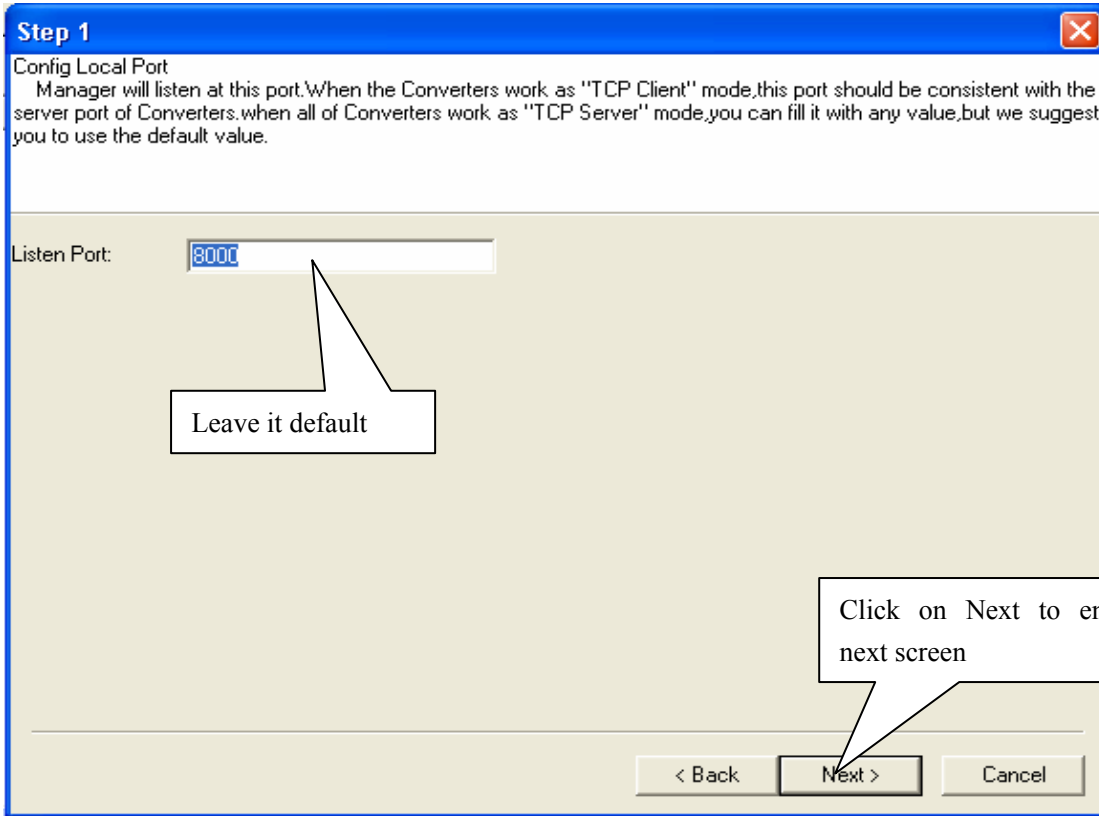
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7. Step IV - Map IP of TC3XYNT/C2000 to a Virtual COM

Lunch Start → Programs → C2000Plus → Manager to run the Manager software.

The screen would look like below.





Step 3

Mapping mode
 If you have created one Virtual COM, please select "All Converters' serial ports map to this Virtual COM". Otherwise, select "One serial port map to one virtual COM", then fill Converter's number and "Virtual COM", finally add them to the list.

Map Option
 All Converters' serial ports map to this Virtual COM
 One serial port map to one virtual COM

COM5

Map List

MAC	Serial ...	Virtual COM	MAC:	Model:	Serial Port:	Virtual COM:
			0009f6			COM5

Select the Virtual Port you want to mapped to

Select "All Converter's serial ports map to this Virtual COM" to map every controller/convertor into this port.

Click on Next to enter next screen

< Back Next > Cancel

Step 4

There are "TCP Server" Converters.
 If the Converters work as "TCP Server" mode, please select "There are TCP Server Converters", then fill the table with Converter's IP and Listen port, finally add them to the list.

There are "TCP Server" Converters.

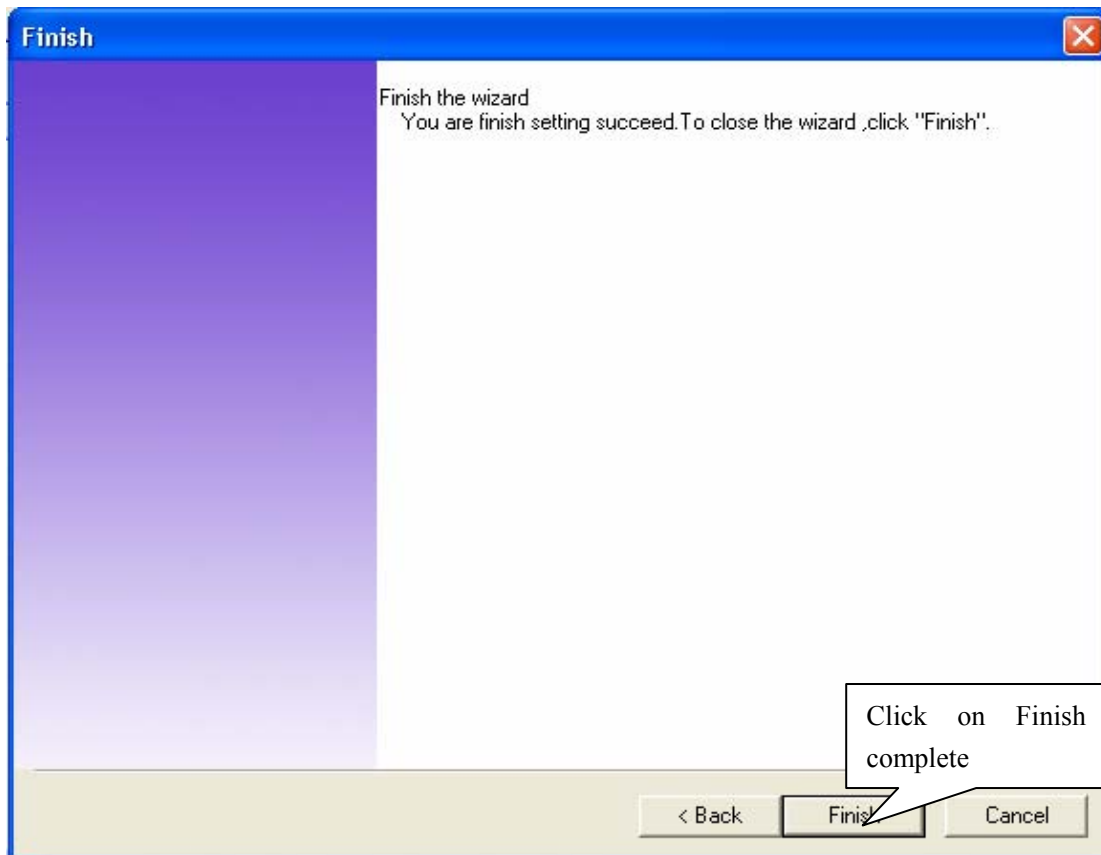
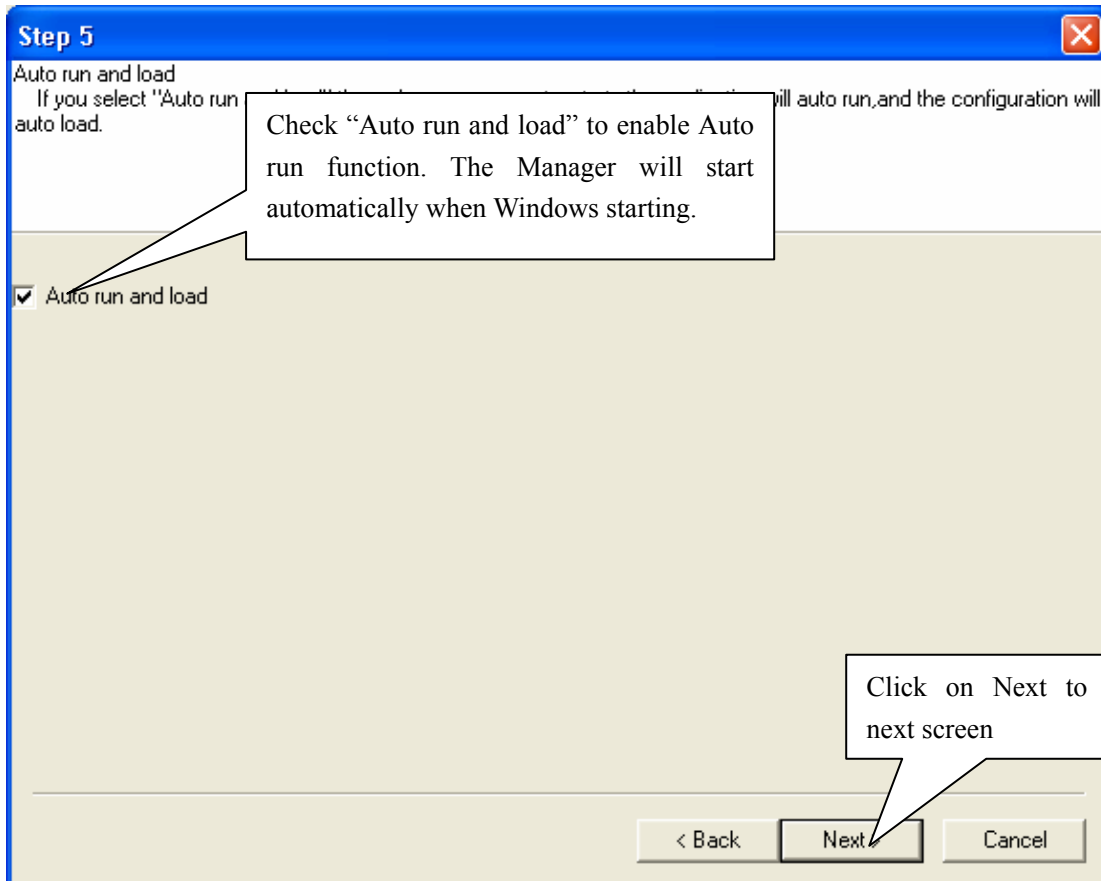
Converter list

IP	Port	IP:	Port:
192.168.0.110	8000	192.168.0.110	8000

Add<<< >>>Delete

Click on Next to enter next screen

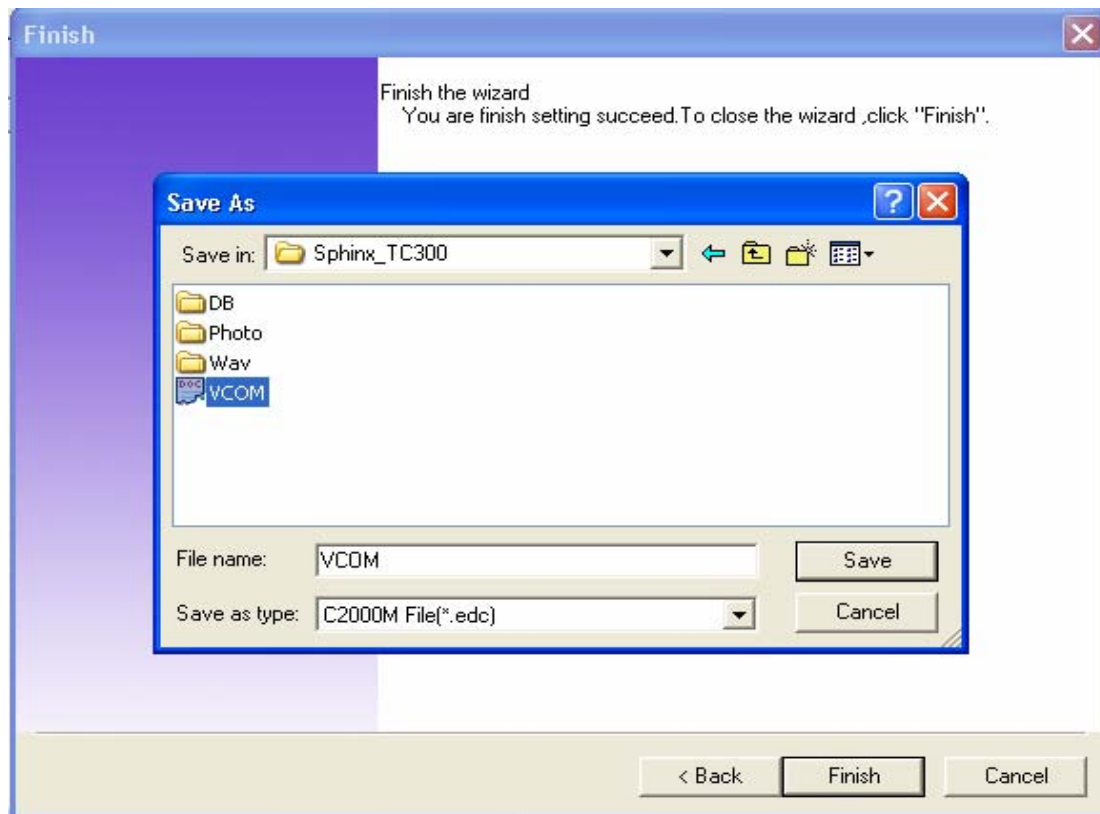
< Back Next > Cancel

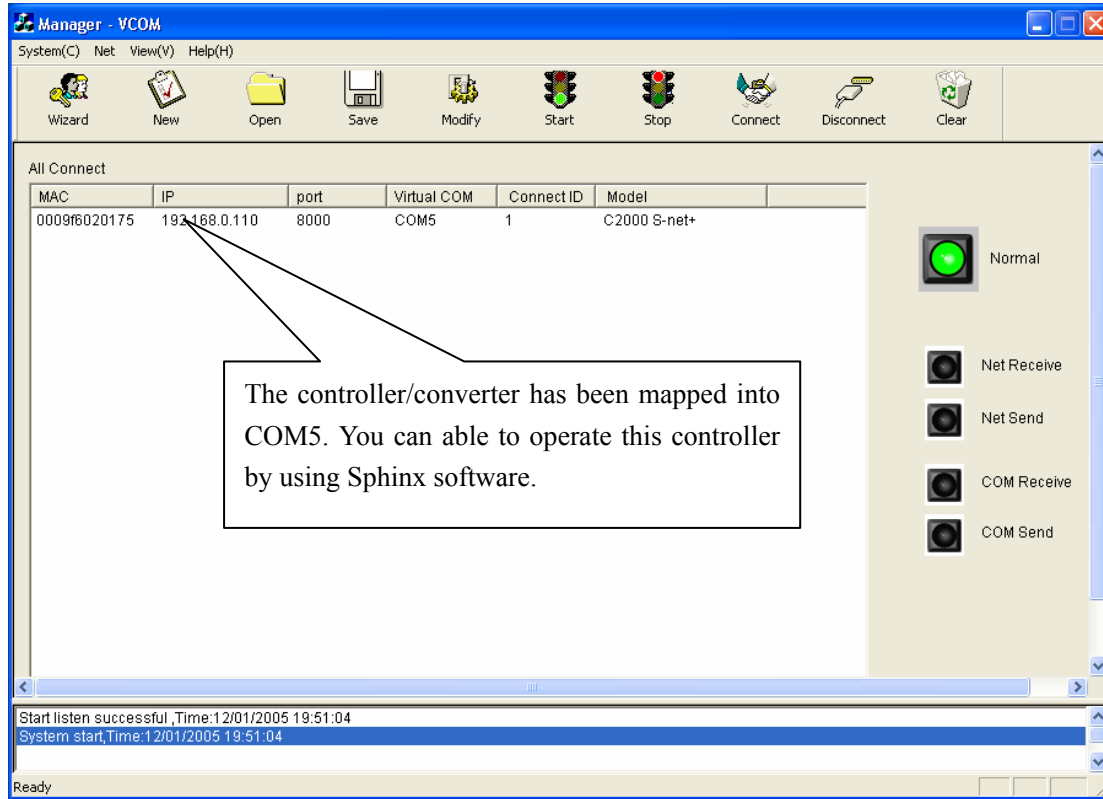


8. Step V – Save Settings

After finishing Step IV, the wizard will offer you save the new setting into a file.

Manager will use this file in the next loading. You can able to copy this file to other PC for Manager on that PC.





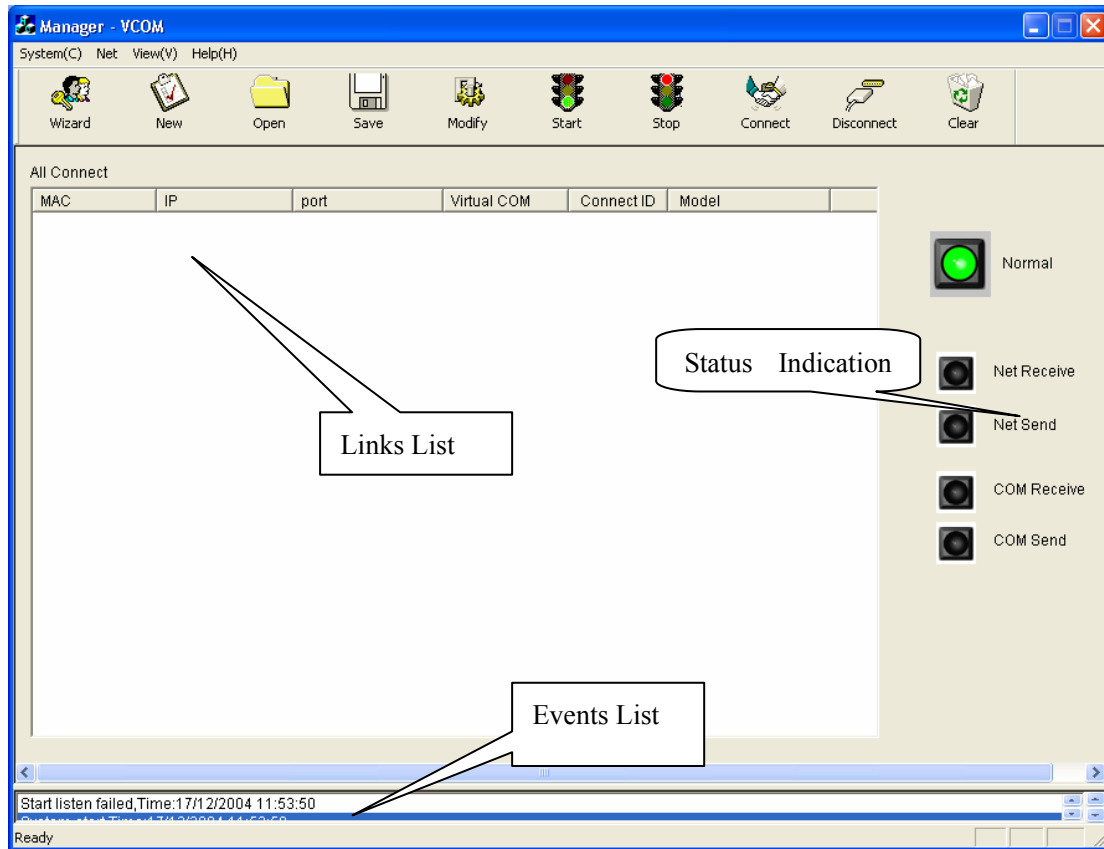
9. Install and Un-install Virtual COM Driver:

By default the Virtual COM Driver will be installed and uninstalled automatically when you install and uninstall the C2000Setup_Eng.

Install: "Start" → "Programs" → "C2000Plus" → "Install Virtual COM Driver".

Uninstall: "Start" → "Programs" → "C2000Plus" → "Uninstall Virtual COM Driver"

10. C2000 Manager Operation instruction:



- Link

List: List all Controllers/ Converters and their mapping port those connect to the Manager.

- C2000 MAC address: The Controller/Converter network physical address.
- IP: Controller/Converter IP.
- Virtual COM: The Virtual COM port which is mapped to Controller/Converter.
- Connect ID: The connect ID of the network built between Controller/Converter and Manager.
- Model: Model number of TCP module of Controller/Converter.
- Status Indication: It will show you the Manager working status.
- Events List: System events. Any actions and mistake will be displayed here.
- New: Make a new setting file.
- Open: Open a setting file saved to disk.
- Save: Save the setting to disk.
- Modify: Modify the current setting.